

XP-002265067

(C) FILE CA

N CA Caesar accession number : 1219

- 128762581 CA

- Photocurable resin compositions with high refractive index and resistance to scratch and heat and optical lenses made from them

- Patent

- Suzuki, Yoshiyuki; Kawauchi, Keiya; Kobayashi, Seichi; Imai, Masao; Fuji Kenichi

- Mitsui Toatsu Chemicals, Inc., Japan

- Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

PATENT NO. KIND DATE APPLICATION NO. DATE

- JP9302040 A 19971125 JP 1996-114772 19960509

- 1997

- The title compns. comprise (A) 50-80% thio(meth)acrylate compds.

$RSCH_2CHR_2[X(CH_2)_i]_jX(CH_2CH_2S)_kR$ ,  $C_6H_4[(CH_2)_mS(CH_2CH_2S)_nR]_2$  or

$R_3C[CH_2(SCH_2CH_2)_rSR][CH_2(SCH_2CH_2)_tSR][CH(SCH_2CH_2)_sSR]$  IR =  $COCr_1:CH_2$ ;  $R_1$   $R_2 = H, Me$ ;  $R_3 = H, Me, Et$ ;  $X = O, S$ ;  $i = 1-2$ ;  $j, k, m, n, r, s, t = 0-1$

(B) 5-20% (meth)acrylate compds. having functionality  $\geq 3$ , and (C) 10-30% polythiol compds. having functionality  $\geq 3$ . Irradiating the

title resins with UV lights gives cured products with refractive index (nd)  $\geq 1.58$ , which are useful for lightweight eyeglass lenses, etc.

Thus, molding a compn. comprising bis(2-acryloylthioethyl) sulfide 60.0, trimethylolpropane trimethacrylate 15.0, pentaerythritol

tetrakis(mercaptopropionate) 25.0, and 2-hydroxy-2-methyl-1-phenylpropane 0.04 part then irradiating with UV lights gave a lens having nd 1.60

Abbe no. 39, good dyeability and good resistance to impact, heat and scratch.

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P1-5 (5)

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IT - 200346-97-0P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(photocurable resin compns. with high refractive index and resistance to scratch and heat and optical lenses made from them)

RN - 200346-97-0 CA

CN - 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[2-methyl-1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) and S,S'-1,4-phenylene bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

CRN 131456-17-2

CMF C14 H14 O2 S2

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CM 2

CRN 7575-23-7

CMF C17 H28 O8 S4

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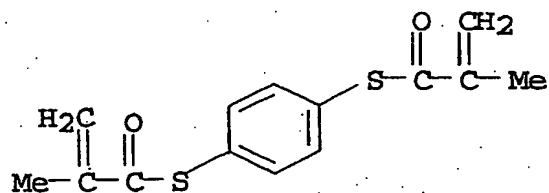
CM 3

CRN 3290-92-4

CMF C18 H26 O6

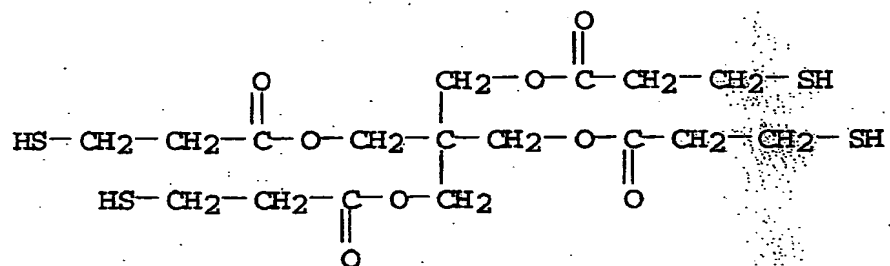
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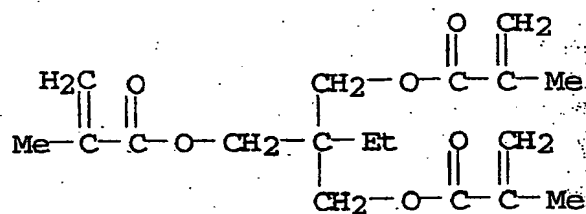
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